

Dear Mr. Hancharick:

I appreciate your virtual hearing for the Penneco Sedat 4A injection well in Plum Borough, Pa. Please deny it.

I do not believe believe that old gas well should be used for an injection well for which it was not originally designed. That is a poor engineering practice. The objectors are quite correct about the fact that an injection well will have high pressure cyclic stress (fatigue). Those pressure cycles could very well lead to leaks. My materials science class manual from circa 1990 states that " A metal subjected to repetitive or fluctuating stress (fatigue) will fail at a stress much lower than that required to cause fracture on a single application of load." Fatigue is a big concern with respect to metals failure such as the steel piping in this old well.

I also agree with the other concerns stated by the objectors. Already complaints from near-by residents about tainted well and spring water since the sister Sedat 3A injection well (former gas well) began operating in late spring 2021 were reported in the December 10, 2021 Tribune Review Article by Joyce Hanz titled "2<sup>nd</sup> Injection Well Project Faces Opposition From Residents, Borough Officials."

Leaking wells could end up contaminating the Allegheny River and harming the water supplies for thousands of people.

Thanks for your consideration,

[illegible]